

**MINUTES
VIRGINIA OFFSHORE WIND DEVELOPMENT AUTHORITY
PERIMETER CONFERENCE CENTER
RICHMOND, VIRGINIA**

**THURSDAY, JANUARY 17, 2013
10:00 A.M.**

CALL TO ORDER

Chair Bob Matthias called the meeting to order at 10:20 a.m.

Members Present: Bob Matthias, Joan Bondareff, Mary Doswell, Brian Redmond, Lisa Johnson, Art Moye, John Jester, Ron Ritter

Staff: Conrad Spangler, DMME Director, Cathie France, DMME Deputy Director for Energy Policy; Al Christopher, DMME Energy Division Director; Ken Jurman, DMME Renewable Energy Manager, Sarah Surber, Assistant Attorney General; Jon Miles, Virginia Center for Wind Energy-JMU; Rick Thomas, Timmons Group

Guests: HiDef Aerial Surveying Limited: Mark Robinson, Co-Founder; Princeton Energy Resources International: Daniel Ancona, Vice President; NASA Langley Research Center: Grady Koch, Electro-Optical Engineer; Dominion Resources Inc.: Guy Chapman, Director of Renewable Energy Research and Program Development; Fugro Atlantic: Tom McNeilan, Vice President-East Coast Regional Manager.

APPROVAL OF MINUTES

The Chair called for a motion to approve the October 11, 2012, minutes as presented. The motion to accept the minutes passed unanimously.

HIDEF AERIAL SURVEYING PRESENTATION

Presenter: Mark Robinson

Mark Robinson presented an overview of HiDef Aerial Surveying and baseline studies on the mid-Atlantic Outer Continental Shelf. He discussed the use of airborne videography surveys for monitoring offshore populations and activities of seabirds, sea mammals, and sea turtles. A copy of the slide presentation will be available on the VOWDA web site, <http://wind.jmu.edu/offshore/vowda/index.html>.

PRINCETON ENERGY RESOURCES INTERNATIONAL SHALLOW WATER WIND STUDY PRESENTATION

Presenter: Dan Ancona

Dan Ancona presented some of the analysis and results of offshore wind potential in shallow, sheltered estuarine waters of Virginia, Delaware, Maryland, and North Carolina, from the recent DOE-funded wind study on the barriers to wind energy development in the Mid-Atlantic region. Key conclusions from the study are that project costs increase 20-40% or more in the ocean vs. shallow waters, and that bay-based projects could be cost effective today, but offshore is 2x higher cost of energy. A link to the report, "Mid-Atlantic Wind—Overcoming the Challenges" is available on PERI's website, <http://perihq.com/renewable.htm>. A copy of the slide presentation will be available on the VOWDA web site, <http://wind.jmu.edu/offshore/vowda/index.html>.

NASA LANGLEY AIRBORNE LIDAR WIND MEASUREMENT INITIATIVE PRESENTATION

Presenter: Grady Koch

Grady Koch briefed members on the preliminary experiments and proposal for the use of airborne LIDAR technology to map three-dimensional offshore wind characteristics in the Virginia Wind Energy Area (WEA).

- NASA's airborne Doppler lidar has the capability to map 3-dimensional winds of an offshore WEA.
- Trends in wind shown in the presentation for the Virginia WEA are for one example measurement. Many such observations are needed to create a representative characterization of the wind resources.
- Improvements to lidar instrumentation are in progress after lessons learned from 2012 installation in the UC-12B aircraft.
- Another set of flights is funded and scheduled for April or May 2013.
- A proposal to NASA is under review now for expanded work to include: more flights spread over the span of a year, concentrating on the Virginia offshore WEA; the use of lidar results to further validate the WeatherFlow forecast model; and technology improvement for simpler operation of instrument

VIRGINIA WIND ENERGY AREA OCEAN GEOLOGICAL SURVEY RFP UPDATE

Presenter: Tom McNeilan

Fugro Atlantic was selected to conduct the geological and geophysical survey of the Virginia Wind Energy Area, which will help further development of the WEA and the offshore wind energy supply chain. Tom McNeilan presented an overview of the planned scope of work and regional survey products. The target date for the final report is September 2013, the end of the federal fiscal year. A copy of the slide presentation will be available on the VOWDA web site, <http://wind.jmu.edu/offshore/vowda/index.html>.

DOE OFFSHORE WIND ADVANCED TECHNOLOGY DEMONSTRATION FOA UPDATE

Presenter: Guy Chapman

Guy Chapman reported that Dominion Virginia Power received one of seven awards from DOE for its turbine foundation technology demonstration project. These seven projects will demonstrate next-generation offshore wind technologies and support offshore installations in state and federal waters for commercial operation by 2017. In the initial phase, each project will receive \$4 million to complete the engineering, design and permitting phase of the award. In 2014, DOE will select three projects for final design and construction; each project will receive \$47 million over a four-year period.

The Dominion-led team includes Alstom Power, KBR, DMME, National Renewable Energy Laboratory, Virginia Tech Advanced Research Institute, and Newport News Shipbuilding. Guy introduced Albert Fisas, Director of Innovation for Alstom's North American Wind Business. The proposal includes the installation of two Alstom Haliade 150 offshore wind turbines on innovative twisted jacket foundations approximately 22 miles off the coast of Virginia Beach. A copy of the slide presentation will be available on the VOWDA web site, <http://wind.jmu.edu/offshore/vowda/index.html>.

DMME UPDATES

Al Christopher reported that DMME notified responders to the Commercial Call that today's VOWDA meeting featured presentations on technology that is useful to characterize the Virginia Wind Energy Area, including the Fugro ocean survey jointly funded by DMME and BOEM. He noted that Fugro might also be able to piggyback additional data collection services requested by private entities. However, all data collected from such study, if it leverages the public funding, will be considered public data and shared with all interested parties.

Al also reported that the U.S. Department of Energy announced it will acquire the Chesapeake Light Tower (CLT) to turn it into a Reference Facility for Offshore Renewable Energy. VCERC and CIT representatives met in Herndon, VA, with the DOE program managers for this initiative to discuss ways these organizations can provide local support in coordinating shore-side support and facilitating stakeholder engagements among existing CLT users. VCERC research director George Hagerman will provide an update at the next VOWDA meeting.

VOWDA MEETING DATES

The next meeting will be scheduled in March, date and location to be determined. To help facilitate venue reservations and meeting planning, staff will send members a proposed list of 2013 meeting dates for their consideration.

VIRGINIA RENEWABLE ENERGY INCENTIVES

The Virginia Attorney General's Office and the state's largest electric utilities are proposing to repeal financial incentives for using renewable energy. Under the agreement announced this week by the attorney general's office, Dominion Virginia Power and Appalachian Power would no longer be eligible to receive financial incentives for using sources of renewable energy or building new power plants that use fossil fuels. Incentives will still remain for nuclear and offshore wind, but would be reduced. [HB 2261 and SB 1339]

PUBLIC COMMENTS

Eileen Levandoski (Sierra Club) invited VOWDA to join them for the 3rd Annual Clean Energy Business Lobby Day on Thursday, January 24, 2013 -- representatives of renewable energy businesses will meet with legislators, a press conference will be held at Noon, and a legislative reception will be held at the Richmond Marriott at 5 p.m.

Justin Allegro (National Wildlife Federation) said the NWF, working with three leading offshore wind companies, reached an agreement for additional mitigation measures to protect the North Atlantic right whale when it migrates through the mid-Atlantic during site assessment and characterization activities related to offshore wind energy development in the mid-Atlantic Wind Energy Areas. A letter on this was sent to BOEM on December 12, 2012. He will send a link to DMME staff to provide to VOWDA members.

Aviv Goldsmith (Fishermen's Energy) commented that the federal process for the commercial lease sale for the Virginia WEA isn't yet finalized and suggested there's still time to provide comments to BOEM if VOWDA didn't think the single lot auction was in the best interest for Virginia. Chair Bob Matthias asked Al Christopher, who will attend the BOEM public seminar on the proposed sale notice for the commercial wind area in Virginia, to advise VOWDA if they need to take a supplemental position.

ADJOURNMENT

The meeting adjourned at 1:00 p.m.